

GPRC5B (H-64): sc-135260

BACKGROUND

GPRC5B (G protein-coupled receptor family C group 5 member B, retinoic acid-induced gene 2 protein) is a 403 amino acid protein encoded by the human GPRC5B gene. GPRC5B is an orphan receptor member of the G protein-coupled receptor 3 family. G protein-coupled receptors (GPCRs or GPRs) contain 7 transmembrane domains and transduce extracellular signals through heterotrimeric G proteins. Key roles for G protein-coupled receptors include control of protein maturation and cell surface delivery, and providing the correct framework for interactions with both heterotrimeric G proteins and arrestins to allow signal generation and termination. This retinoic acid-inducible G protein-coupled receptor provides evidence for a possible interaction between retinoid and G protein signaling pathways. GPRC5B is highly expressed in kidney, pancreas and testis, and has moderate expression in brain, heart, prostate, small intestine and spleen.

REFERENCES

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2. Robbins, M.J., Michalovich, D., Hill, J., Calver, A.R., Medhurst, A.D., Gloger, I., Sims, M., Middlemiss, D.N. and Pangalos, M.N. 2000. Molecular cloning and characterization of two novel retinoic acid-inducible orphan G protein-coupled receptors (GPRC5B and GPRC5C). *Genomics* 67: 8-18.
3. Robbins, M.J., Charles, K.J., Harrison, D.C. and Pangalos, M.N. 2002. Localisation of the GPRC5B receptor in the rat brain and spinal cord. *Brain Res. Mol. Brain Res.* 106: 136-144.
4. Takeda, S., Kadowaki, S., Haga, T., Takaesu, H. and Mitaku, S. 2002. Identification of G protein-coupled receptor genes from the human genome sequence. *FEBS Lett.* 520: 97-101.
5. Inoue, S., Nambu, T. and Shimomura, T. 2004. The RAIG family member, GPRC5D, is associated with hard-keratinized structures. *J. Invest. Dermatol.* 122: 565-573.

CHROMOSOMAL LOCATION

Genetic locus: GPRC5B (human) mapping to 16p12.3; Gprc5b (mouse) mapping to 7 F2.

SOURCE

GPRC5B (H-64) is a rabbit polyclonal antibody raised against amino acids 137-200 mapping within an internal region of GPRC5B of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

GPRC5B (H-64) is recommended for detection of GPRC5B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GPRC5B (H-64) is also recommended for detection of GPRC5B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPRC5B siRNA (h): sc-62409, GPRC5B siRNA (m): sc-62410, GPRC5B shRNA Plasmid (h): sc-62409-SH, GPRC5B shRNA Plasmid (m): sc-62410-SH, GPRC5B shRNA (h) Lentiviral Particles: sc-62409-V and GPRC5B shRNA (m) Lentiviral Particles: sc-62410-V.

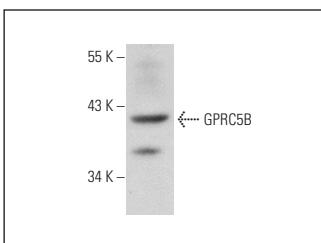
Molecular Weight of GPRC5B: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or RT-4 whole cell lysate: sc-364257.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GPRC5B (H-64): sc-135260. Western blot analysis of GPRC5B expression in RT-4 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
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Try **GPRC5B (1H1): sc-293290**, our highly recommended monoclonal alternative to GPRC5B (H-64).